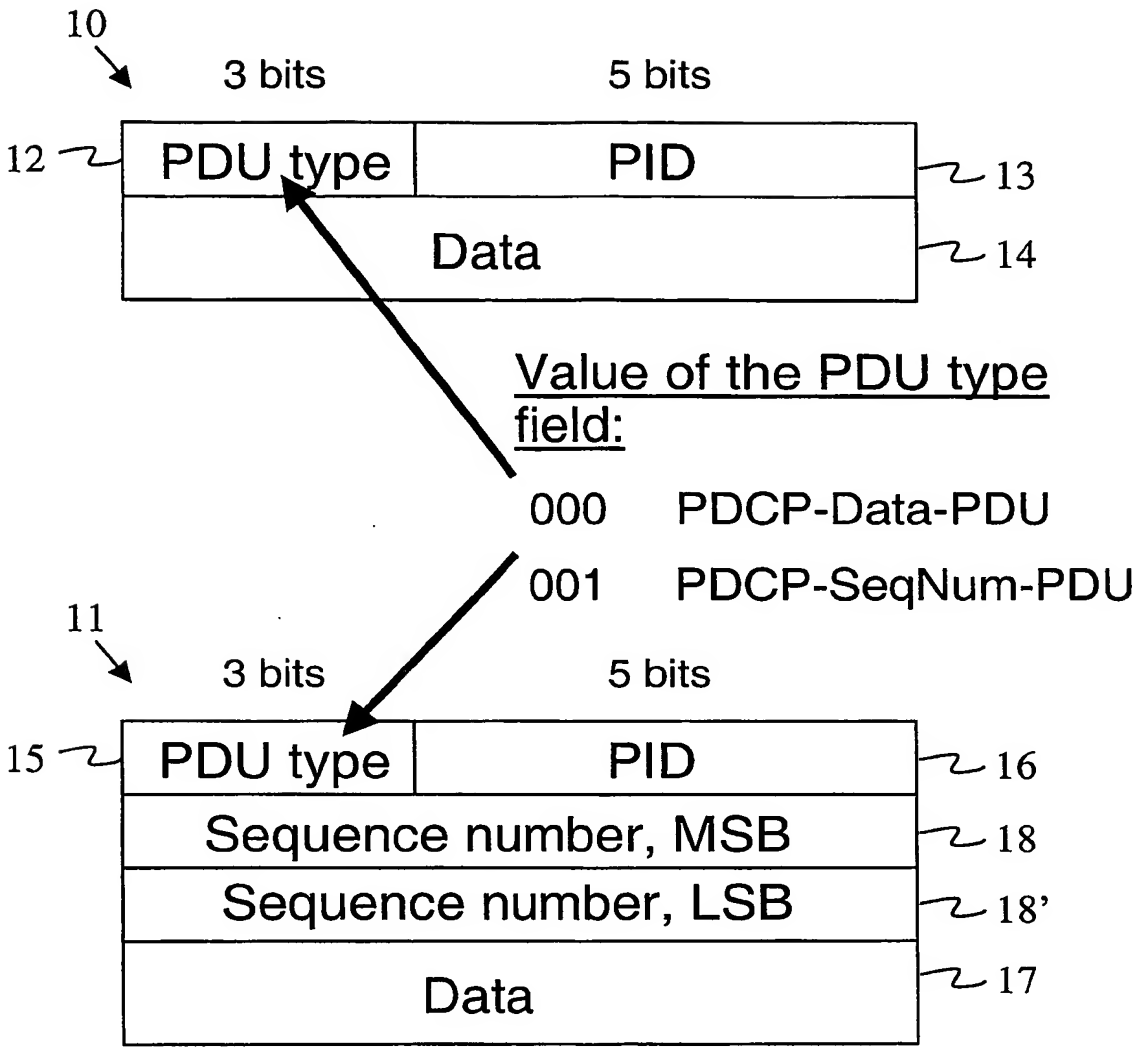

FIG 1 (Prior art)

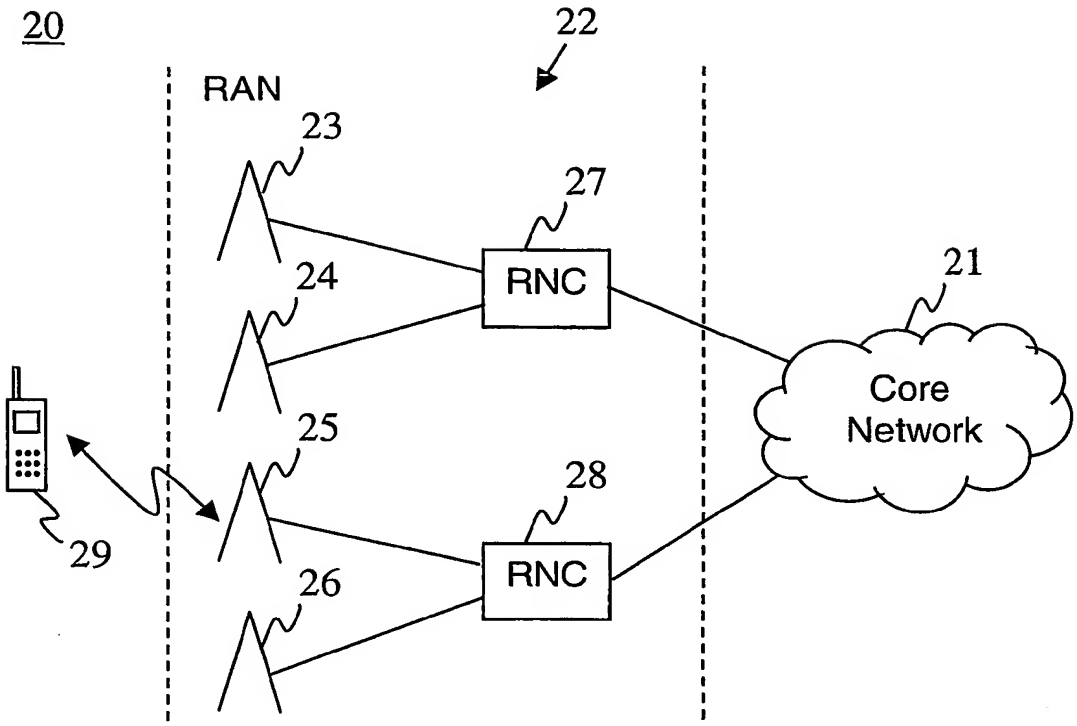
20
22
RAN
23
27
24
RNC
21
Core
Network
25
28
29
RNC
26

FIG 2

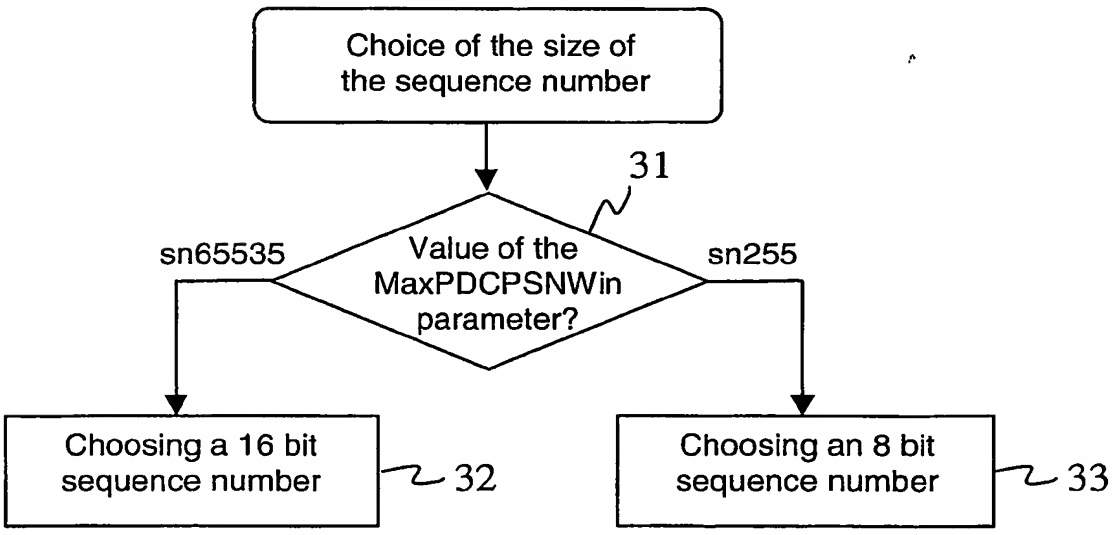
Choice of the size of the sequence number
31
sn65535
Value of the MaxPDCPSNWin parameter?
sn255
Choosing a 16 bit sequence number
32
Choosing an 8 bit sequence number
33

FIG 3

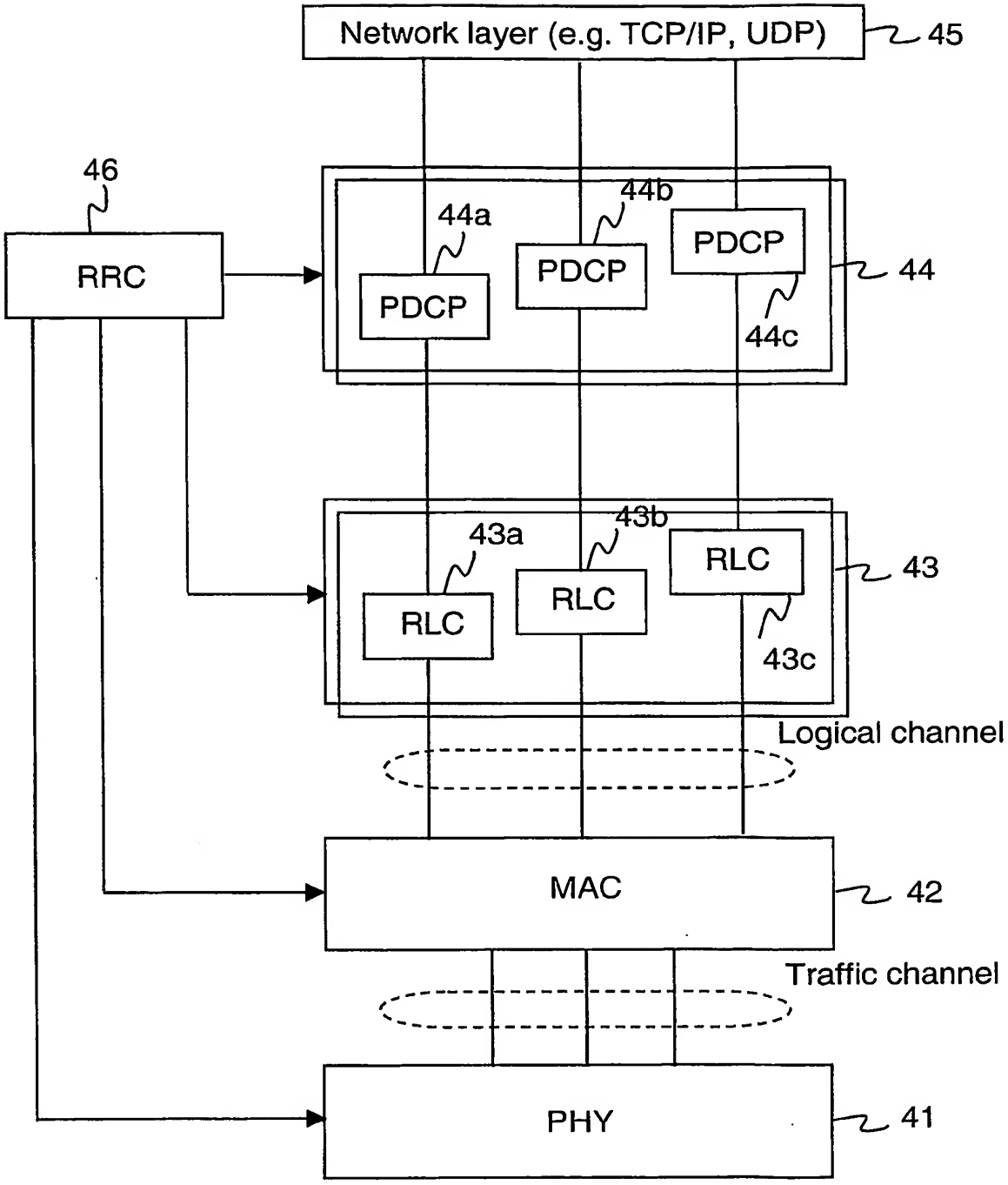
Network layer (e.g. TCP/IP, UDP)
45
46
RRC
44a
44b
PDCP
PDCP
PDCP
44
44c
43a
43b
RLC
RLC
RLC
43
43c
Logical channel
MAC
42
Traffic channel
PHY
41

FIG 4

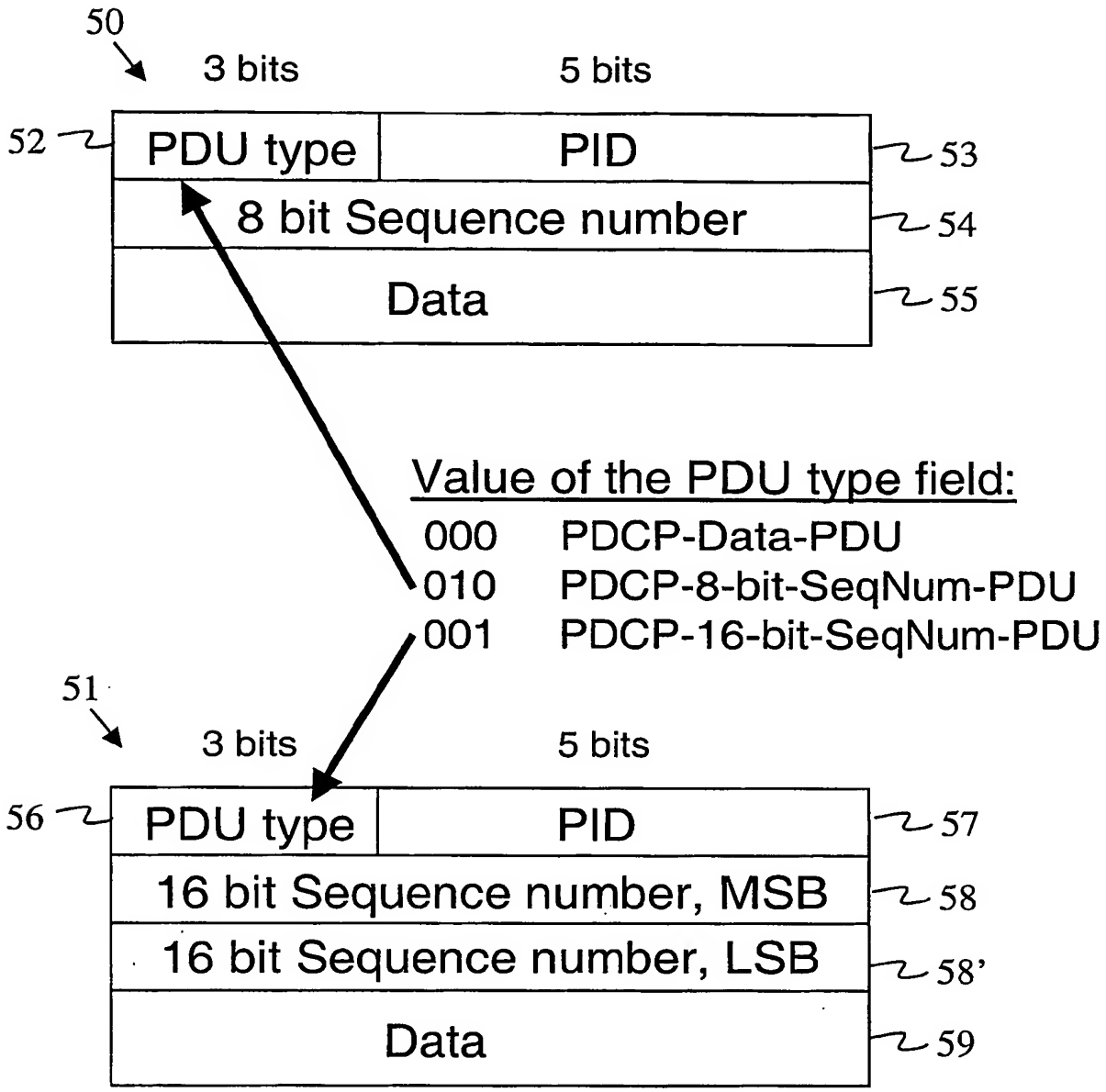
50
3 bits
5 bits
52
PDU type
PID
53
8 bit Sequence number
54
Data
55
Value of the PDU type field:
000 PDCP-Data-PDU
010 PDCP-8-bit-SeqNum-PDU
001 PDCP-16-bit-SeqNum-PDU
51
3 bits
5 bits
56
PDU type
PID
57
16 bit Sequence number, MSB
58
16 bit Sequence number, LSB
58'
Data
59

FIG 5

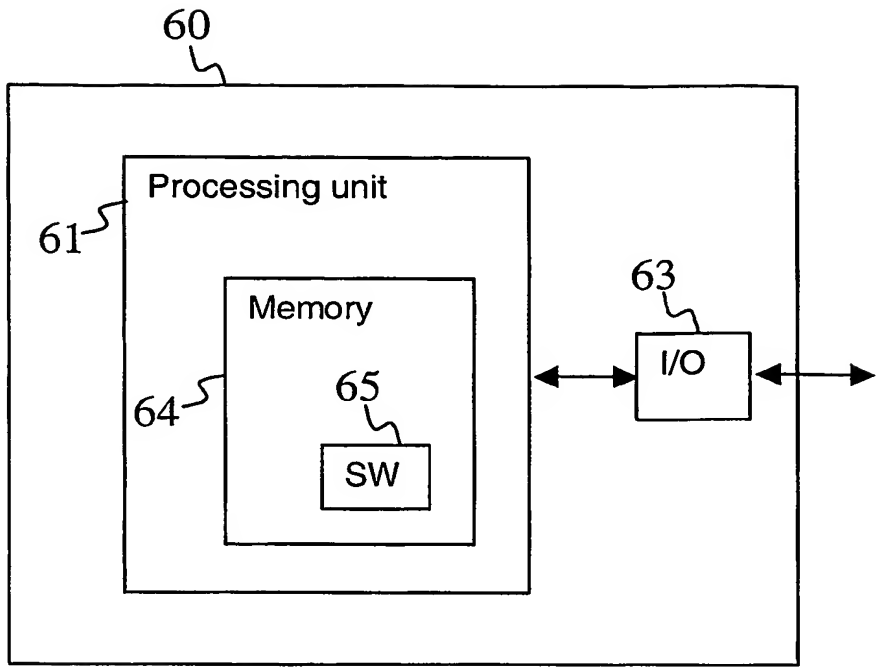
60
Processing unit
61
Memory
64
65
SW
63
I/O

FIG 6

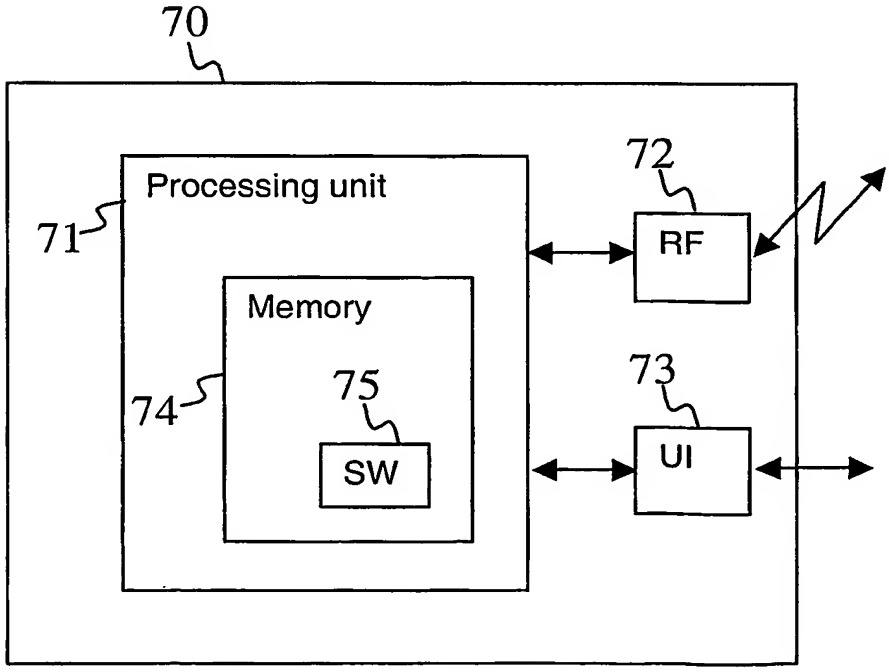
70
Processing unit
71
Memory
74
75
SW
72
RF
73
UI

FIG 7